Chapter 16.53
BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND SITE DEVELOPMENT

Sections:

~~16.53.010 Protection for storm sewer inlets.~~
~~Storm sewer inlets receiving water from a project site during construction or site development shall be protected so that sediment-laden water will be filtered before entering the conveyance system. (Ord. 2005-20 § 1, 2005).~~

~~16.53.020 Dust control.~~
~~As necessary in the event that sediment is being visibly transported from a construction or development site across property boundaries, or by order of the administrator or designee, the proponent shall spray soil with water or approved dust palliative.~~
~~(Ord. 2005-20 § 1, 2005).~~

~~16.53.030 Stockpile management.~~
~~Soil stockpiles shall be set back at least 50 feet from down gradient drainage features (e.g., channels, catch basins, detention ponds, pavement, stream banks, and environmentally sensitive areas). No material shall be stockpiled on pavement without authorization from the administrator or designee which will be conditional on implementation of a procedure to prevent sediment transport.~~
~~(Ord. 2005-20 § 1, 2005).~~

~~16.53.040 Construction entrances.~~
~~Construction site entrances are egress points for vehicles onto paved roadways. All projects which have vehicular traffic shall have a means to prevent vehicles from tracking soils from the site. The administrator or designee may require that access points, roads, tire washing areas, and parking areas be constructed and maintained to keep sediment confined to the construction or development site. Vehicles shall only use designated access points to access a construction or development site. The access point(s) shall be maintained to prevent the transport of sediment onto public streets and rights-of-way. Should sediment be tracked off-site, sediment shall, on a daily basis, be shoveled and swept from the paved surface before washing. (Ord. 2005-20 § 1, 2005).~~

~~16.53.050 Erosion control facilities must be maintained.~~
~~Erosion control facilities shall not be allowed to fall into disrepair. The proponent or designee shall inspect facilities during and after rainfall events to ensure that they continue to function effectively. Repairs shall be made as soon as possible during rainfall events. (Ord. 2005-20 § 1, 2005).~~

16.53.010 Definitions.

A. "Best Management or Development Practices (BM/DPs), Best Management Practice (BMP)" shall mean the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices, that when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington state.

B. "Buffer or Buffer Zone" shall mean the zone contiguous with a sensitive area that is required for the continued maintenance, function, and structural stability of the sensitive area. The critical functions of a riparian buffer (those associated with an aquatic system) include shading, input of organic debris and coarse sediments, uptake of nutrients, stabilization of banks, interception of line sediments, overflow during high water events, protection from disturbance by humans and domestic animals, maintenance of wildlife habitat, and room for variation of aquatic system boundaries over time due to hydrologic or climatic effects. The critical functions of terrestrial buffers include protection of slope stability, attenuation of surface water flows from stormwater runoff and precipitation, and erosion control.

C. "Caliper" shall mean the diameter of any tree trunk as measured at a height of four feet above the ground on the upslope side of the tree.

D. "Creek" shall mean those areas where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is indicated by hydraulically sorted sediments or the removal of vegetative litter or loosely rooted vegetation by the action of moving water. The channel or bed need not contain water year around. This definition is not meant to include storm water runoff devices or other entirely artificial watercourses unless they are used to store and/or convey pass-through stream flows naturally occurring prior to construction.

E. "Clearing" shall mean the act of cutting and/or removing vegetation. This definition shall include grubbing vegetation.

F. "Clearing and Grading Permit" shall mean the written approval of the Town of Eatonville Town Planner or designee to proceed with the act of clearing property within the town limits of Eatonville. The Clearing and Grading Permit includes the associated approved plans and any conditions of approval as well as the permit form itself.

G. "Critical Area" shall mean any area designated as a critical area pursuant to RCW 36.70A.170 and Chapter 15.16 EMC.

H. "Degradation" shall mean degradation of an area includes, but is not limited to, impacts such as sedimentation, erosion, and loss of shading, light, and noise.

I. "Developed lot" shall mean a lot or parcel of land upon which a structure(s) is located, which cannot be more intensively developed pursuant to the town zoning code, and which cannot be further subdivided pursuant to town subdivision regulations.

J. "Development" shall mean any activity that requires federal, state, or local approval for the use or modification of land or its resource. These activities include, but are not limited to, subdivision and short subdivisions; binding site plans; planned unit developments; variances; shoreline substantial development; clearing activity; excavation; embankment; fill and grade work; converting fallow land or undeveloped land to agricultural purposes; activity conditionally allowed; building or construction; revocable encroachment permits; and septic approval.

K. "Development Area" shall mean an area where the movement of earth, or a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography occurs as a result of an applicant's development plans.

L. "Drainage Plan" shall mean a plan for receiving, handling, and transporting surface water or groundwater runoff within the site.

M. "Drip line" of a tree shall be described by a line projected to the ground delineating the outermost extent of foliage in all directions.

N. "Dry Season" shall mean the period of May 1 through September 30.

O. "Ecology" shall mean Washington State Department of Ecology.
P. "Engineered Fill" shall mean soil fill, which is wetted or dried to near its optimum moisture content, placed in lifts of 12 inches or less and each lift compacted to a minimum percent compaction as specified by a geotechnical engineer.
Q. "Erosion" shall mean the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep. Also, the detachment and movement of soil or rock fragments by water, wind, ice, or gravity. The following terms are used to describe different types of water erosion:
    1. Accelerated erosion – Erosion much more rapid than normal or geologic erosion, primarily as a result of the influence of the activities of humans or, in some cases, of the animals or natural catastrophes that expose bare surfaces (e.g., fires).
    2. Geological erosion – The normal or natural erosion caused by geological processes acting over long geologic periods and resulting in the wearing away of mountains, building up of floodplains, coastal plains, etc. Synonymous with natural erosion.
    3. Gully erosion – The erosion process whereby water accumulates in narrow channels and, over short periods, removes the soil from this narrow area to considerable depths, ranging from one (1) to two (2) feet to as much as seventy-five (75) to one hundred (100) feet.
    4. Natural erosion – Wearing away of the earth's surface by water, ice, or other natural agents under natural environmental conditions of climate, vegetation, etc., undisturbed by humans. Synonymous with geological erosion.
    5. Normal erosion – The gradual erosion of land used by humans, which does not greatly exceed natural erosion.
    6. Rill erosion – Erosion processes in which numerous small channels only several inches deep are formed; occurs mainly on recently disturbed and exposed soils.
    7. Sheet erosion – The removal of a fairly uniform layer of soil from the land surface by runoff.
    8. Splash erosion – The spattering of small soil particles caused by the impact of raindrops on wet soils. The loosened and spattered particles may or may not be subsequently removed by surface runoff.
R. "Excavation" shall mean the removal of material such as earth, sand, gravel, rock, or asphalt.
S. "Fill" shall mean earth, sand, gravel, rock, asphalt, or other solid material used to increase the ground surface elevation or to replace excavated material.
T. "Filling" shall mean the act of placing fill material (earth, sand, gravel, rock, asphalt, or other solid material) on any soil surface, natural vegetative covering, or other fill material to raise the ground elevation or to replace excavated material.
U. "Geotechnical Engineer" shall mean a professional engineer currently registered in the state of Washington, qualified by reason of experience and education in the practice of geotechnical engineering, and designated by the owner as the geotechnical engineer of record for the project.
V. "Grading" shall mean the movement of earth material through mechanical or other means to create the finished surface and contour of a project site.
W. "Grubbing" shall mean the act of removing vegetation by the roots.
X. "Ground cover" as defined in 18.02.172, shall mean low-growing vegetative materials with a mound or spreading manner of growth that provides solid cover within two years after planting. Examples include sod or seed lawn, ivy, junipers, cotoneaster, etc. (Ord. 94-06 § 2,1994).
Y. "Impervious Area" shall mean a hard surface area (e.g., parking lot or rooftop) that prevents or impedes the entry of water into the soil, thus causing water to run off the surface in greater quantities or at an increased rate of flow.

Z. "Lakes" shall mean natural or artificial bodies of water of two or more acres and/or where the deepest part of the basin at low water exceeds two meters (6.6 feet). Artificial bodies of water with a recirculation system approved by the public works department are not included in this definition.

AA. "Land development permit" shall mean a preliminary or final plat for a single-family residential development; a building permit; site plan; preliminary or final planned unit development plan.

BB. "Land Disturbance Activity" shall mean any activity that results in movement of earth, or a change in the existing soil cover and/or the existing soil topography. Land disturbing activities include, but are not limited to, clearing, grading, filling, and excavation.

CC. "Low Impact Development (LID)" shall mean a stormwater management strategy that emphasizes conservation and use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns in residential, commercial, and industrial settings.

DD. "Mechanical equipment" shall mean all motorized equipment used for earth moving, trenching, excavation, gardening, landscaping, and general property maintenance and shall be commercial grade equipment or greater.

EE. "Native growth area" shall mean a restrictive area where all native, predevelopment vegetation shall not be disturbed or removed except for removal pursuant to an enhancement program approved pursuant to this chapter or to remove dead or diseased vegetation. The purpose of the area is to protect steep slopes, slopes with erosion potential, landslide and seismic hazards, creeks, wetlands and/or riparian corridors, wildlife, and areas shown on the environmentally sensitive areas map. This area shall be defined during the development review process and shown on the recorded plat, short plat or approved site plan.

FF. "Open Space" shall mean land set aside for public or private use within a development that is not built upon.

GG. "Partially developed lot" shall mean a lot or parcel of land upon which a structure (refer to 18.02.510 EMC for the definition of a structure) is located and which is of sufficient area so as to be capable of accommodating additional development pursuant to the Town of Eatonville zoning code; or which may be subdivided in accordance with the Town of Eatonville subdivision chapter.

HH. "Permeable" shall mean soil or other material that allows the infiltration or passage of water or other liquids.

II. "Permit" shall mean, unless otherwise noted, the Clearing and Grading Permit; see Clearing and Grading Permit.

JJ. "Removal" shall mean the actual destruction or causing the effective destruction through damaging, poisoning or other direct or indirect actions resulting in the death of a tree or groundcover species.

KK. "Rockery or Rock Wall" shall mean one or more courses of large rocks stacked near vertical in front of an exposed soil face to protect the soil face from erosion and sloughing.

LL. "Routine landscape maintenance" shall mean pruning, weeding, planting annuals, mowing turf lands and groundcover species management which is undertaken by a person in connection with the normal maintenance and repair of property. This definition does not include felling or topping of trees or removal of invasive plants resulting from lack of regular maintenance.

MM. "Runoff" shall mean water from rain, melted snow, or irrigation that flows over the land surface.

NN. "Sedimentation" shall mean the process of gravity-induced settling and deposition of fragmented rock, soil, or organic particles displaced, transported, and deposited by erosive water-based processes.

OO. "Stormwater Pollution Prevention Plan" shall mean a report containing a narrative and drawings used to explain and justify the pollution prevention decisions made for a particular project. The narrative contains concise information concerning existing site conditions, construction schedules, and other pertinent items that are not contained on the drawings. The drawings and notes describe where and when the various BMPs should be installed, the performance the BMPs are expected to achieve, and actions to be taken if the performance goals are not achieved.

PP. "Stormwater Site Plan" shall mean a comprehensive report containing all of the technical information and analysis necessary for the Town of Eatonville to evaluate a proposed new development or redevelopment project for compliance with stormwater requirements. Contents of the stormwater site plan will vary with the type and size of the project, and individual site characteristics.

QQ. "Tree" shall mean any living woody plant characterized by one main stem or trunk and many branches and having a caliper of six inches or greater, or a multi-stemmed trunk system with a definitely formed crown.

RR. "Undeveloped lot" shall mean a platted lot or parcel of land upon which no structure (refer to 18.02.510 EMC for the definition of a structure) exists.

SS. "Wetlands" shall mean those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar area.

TT. "Wetponds" shall mean drainage facilities for water quality treatment that contain permanent pools of water that are filled during the initial runoff from a storm event. They are designed to optimize water quality by providing retention time in order to settle out particles of fine sediment to which pollutants such as heavy metals absorb. They also allow biologic activity to occur that metabolizes nutrients and organic pollutants.

UU. "Wet Season" shall mean the period of the year between October 1 and April 30.

16.53.020 Performance standards.

All of the performance standards in this section are required unless an exemption from a particular standard is clearly justified in the narrative of the construction SWPPP.

A. Minimize Potential Impacts. All grading and clearing activities shall be conducted so as to minimize potential adverse effects of these activities on forested lands, surface water quality and quantity, groundwater recharge, fish and wildlife habitat, adjacent properties, and downstream drainage channels. The applicant shall attempt to prevent impacts and minimize the clearing of naturally occurring vegetation, retain existing soils, and maintain the existing natural hydrological functions of the site.

B. Stormwater Consistency of Standards. All standards under this code will be consistent with the latest version of the Stormwater Management Manual for Western Washington, pursuant of Title 16.54 EMC.

C. Clearing and Grading and Land Disturbance Limits. Clearing and grading activities for developments shall be permitted only if conducted pursuant to an approved site development plan (e.g., subdivision approval, site plan approval, etc.) that establishes permitted areas of clearing, grading, cutting, and filling. When establishing permitted clearing and grading areas, consideration should be given to minimizing removal of existing trees and minimizing disturbance/compaction of native soils except as needed for building purposes. Permitted clearing and grading areas and any other areas required to preserve critical or sensitive areas, buffers, native growth protection easements, or tree retention areas as may be required by local jurisdictions, shall be delineated on the site plans and the development site.

Prior to beginning land disturbing activities, including clearing and grading, all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area shall be clearly marked, both in the field and on the plans, to prevent damage and offsite impacts.

D. Natural Features and Vegetation Retention. Vegetation, drainage, duff layer, native top soil, and other natural features of the site should be preserved, and the grading and clearing be performed in a manner that attempts to limit areas of impact to the development area (e.g., structures, roads, utilities, sidewalks, parking, landscaping, etc.). Groundcover and tree disturbance shall be minimized, and root zones be protected. Land disturbance activities shall be conducted so as to expose the smallest practical area to erosion for the least possible time. Non Exempt Projects shall be phased to the maximum degree practical and shall take into account seasonal work limitations, to decrease exposed soils and minimize adverse impacts to natural features and vegetation resulting from land disturbance activities. No groundcover species or trees which are within a minimum of fifteen (15) feet of the annual high water mark of creeks, streams, lakes, and other shoreline areas or within ten (10) feet of the top of the bank of the same shall be removed, nor shall any mechanical equipment operate in such areas, provided that conditions deemed by the Town Planner or Designee to constitute a public nuisance may be removed, and provided that a property owner shall not be prohibited from making landscaping improvements where such improvements are consistent with the aims of this section, and where the owner can convincingly demonstrate such consistency to the Town Planner or Designee.

E. Aesthetics. Land disturbance activity shall be undertaken in such a manner so as to preserve and enhance the Town of Eatonville's aesthetic character. Important landscape characteristics that define the aesthetic character, such as large landmark trees, important vegetation species, and unique landforms or other natural features should be preserved to every extent practical.

F. Site Containment. Erosion, sediment, and other impacts resulting from any clearing and grading activity shall be contained on the site. Containment of such impacts may require temporary erosion/ sedimentation control measures during and immediately following clearing and grading activities. The faces of slopes shall be prepared and maintained to control erosion. Check dams, riprap, plantings, terraces, diversion ditches, sedimentation ponds, straw bales, or other devices or methods shall be employed where necessary to control erosion and provide safety. Devices or procedures for erosion protection shall be initiated or installed as soon as possible during grading operations and shall be maintained in operable condition by the owner.

G. Protection of Adjacent and Downstream Properties and Waterways. Downstream properties and waterways shall be protected from erosion during construction due to temporary increases in the volume, velocity, and peak flow rate of runoff from the site. Downstream analysis is necessary if changes in flows could impair or alter conveyance systems, stream banks, bed sediments or aquatic habitat. Where necessary to protect waterways and properties, stormwater retention or detention facilities shall be constructed as one of the first steps in grading. Detention facilities shall be functional prior to construction of site improvements (e.g., impervious surfaces). If permanent infiltration ponds are used for flow control during construction, these facilities should be protected from siltation during the construction phase.

H. Install Sediment Controls. Stormwater runoff from disturbed areas shall pass through a sediment pond, or other appropriate sediment removal BMP prior to entering a storm drain inlet, leaving a construction site, or discharging to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but shall meet the applicable flow control performance standards. Sediment removal BMPs (sediment ponds, traps, filters, etc) shall be constructed as one of the first steps in grading. These BMPs shall be functional before other land disturbing activities take place. BMP's intended to trap sediment on-site shall be located in a manner to avoid interference with the movement of juvenile salmonids attempting to

enter off-channel areas or drainages. If protection is inadequate and deposition occurs on the adjoining property, public right-of-way, or drainage system, the contractor shall immediately remove the deposited sediment and restore the affected area to its original condition.

I. Construction Access. Construction vehicle access shall be, whenever feasible, limited to one route. A temporary access road shall be provided at all sites. Access surfaces shall be stabilized to minimize the tracking of sediment onto adjacent roads by utilizing quarry spalls, crushed rock or other equivalent BMPs. Other measures may be required at the discretion of the Town Planner or Designee in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains. All approach roads shall be kept clean. Wheel wash or tire baths shall be located on site if the stabilized construction entrance is not effective in preventing sediment from being tracked onto public roads. Sediment shall be removed from roads by shoveling or pickup sweeping and shall be transported to a controlled sediment disposal area. Street washing will be allowed only after sediment is removed in this manner. If sediment is tracked off site, public roads shall be cleaned thoroughly at the end of each day, or more frequently during wet weather. Street wash wastewater shall be controlled by pumping back on-site or otherwise be prevented from discharging into systems tributary to state surface waters.

J. Stabilization of Disturbed Areas. All exposed soil shall be stabilized by application of suitable BMPs and soil stabilization measures, including but not limited to sod or other vegetation, plastic covering, mulching, or application of base course(s) on areas to be paved. Soil stabilization measures selected should be appropriate for the time of year, site conditions, estimated duration of use, and potential water quality impacts that stabilization agents may have on downstream waters or ground water. Soils shall be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast. All BMPs shall be selected, designed, and maintained according to the approved manual by the Town Planner or Designee. From October 1 through April 30, no disturbed soil shall remain exposed for more than two days. From May 1 through September 30, no disturbed soil shall remain exposed for more than seven days. Soil stockpiles must be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways and drainage channels. Linear construction activities, including right-of-way and easement clearing, roadway development, pipelines, and trenching for utilities, shall be conducted to meet the soil stabilization requirement.

K. Dust Suppression. Dust from clearing, grading, and other construction activities shall be minimized at all times. Impervious surfaces on or near the construction area shall be swept, vacuumed, or otherwise maintained to suppress dust entrainment. Any dust suppressants used shall be approved by the Town Planner or Designee. Petrochemical dust suppressants are prohibited. Watering the site to suppress dust is also prohibited unless it can be done in a way that keeps sediment out of the drainage system.

L. Erosion and Sedimentation Control. Erosion and sedimentation control BMPs shall be designed and implemented appropriate to the scale of the project and necessary to prevent sediment from leaving the project site, including but not limited to, the standards and requirements described in this chapter, and in the latest edition of the *Department of Ecology Stormwater Management Manual for Western Washington*.

1. In addition to the measures in this and other codes and ordinances, the Town Planner or Designee may impose the following erosion control measures, or other additional measures, as appropriate for the project:
    a. Performance monitoring to determine compliance with state water quality standards, or more stringent standards if adopted by the town.
    b. Funding additional town inspection time, up to a full-time inspector.
    c. Stopping work if necessary to control erosion and sedimentation.

d. Construction of additional siltation/sedimentation ponds.
e. Use of erosion control blankets, nets, or mats in addition to or in conjunction with straw mulch.

2. If the initially implemented erosion and sedimentation BMPs do not adequately control erosion and sedimentation, additional BMPs shall be installed, including but not limited to the extraordinary BMPs described in subsection (1) of this section. It is the contractor's responsibility to ensure sediment does not leave the site in an amount that would violate applicable state, county, or town water quality standards. The Town of Eatonville has the authority to enforce state water quality standards, or, if adopted by the Town of Eatonville, more stringent water quality standards.

3. The timing/sequencing requirements for implementing/removing erosion and sedimentation control measures are as follows:

a. The contractor must install sediment removal BMPs prior to all other clearing, grading, or construction. These BMPs must be functional before other land disturbing activities take place.
b. The contractor must remove all temporary erosion and sediment control BMPs within thirty (30) days after final site stabilization or after the BMP is no longer needed, per agreement of the Town Planner or Designee. Before removing such BMPs, the contractor must remove trapped sediment or stabilize on-site. Any soils disturbed during sediment removal must be permanently stabilized by the contractor.
c. The contractor must complete the required permanent erosion control within seven (7) days of completed grading unless the weather is unsuitable for transplanting. In that case, the contractor must maintain temporary erosion control until permanent restoration can be completed. The period between work completion and final planting shall not exceed one year without written authorization from the Town Planner or Designee.

4. Stabilize Channels and Outlets

a. Temporary on-site stormwater conveyance systems shall be designed, constructed, and stabilized to prevent erosion from leaving the site and impacting properties, streams, and wetlands downstream of the clearing and grading activity. Stabilization measures shall be provided which comply with adopted BMPs at stormwater conveyance system outlets to prevent erosion of outlets, adjacent streambanks, slopes, and downstream reaches or properties.
b. All temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the expected peak 10 minute velocity of flow from a Type 1A, 10- year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used.
c. Stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream reaches shall be provided at the outlets of all conveyance systems.

5. Protection of Critical Areas. The function and values of all critical areas, including all stream types, geologically unstable areas, critical aquifer recharge areas, frequently flooded areas, wetlands, and fish and wildlife conservation areas or habitats, and their critical areas buffers located on or adjacent to the site shall be protected from clearing

and grading activities that result in sedimentation, erosion, and degradation. Such impacts shall be avoided by appropriate use of setbacks, erosion, and sediment control measures and other appropriate best development and management practices consistent with Title 15.16.

6. Avoidance of Hazards. Land disturbance activities shall not result in off-site physical damage, nor pose a danger or hazard to life or property. Neither shall such activities contribute to or create landslides, accelerated soil creep, or settlement of soils.

7. Cut and Fill Slopes. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes shall be stabilized in accordance with the requirements of this section. The applicant shall:

a. Submit a geotechnical report, prepared by a geotechnical engineer, when required pursuant to the Town of Eatonville's Land Use Code including Critical Area Ordinance provisions for qualified professional reports or clearing and grading development standards set forth in Chapter 15.16 EMC. The clearing and grading development standards specify when a subsurface investigation is required and the level of investigation and information required in the report.
b. Minimize clearing and grading on slopes fifteen (15) percent or greater and meet any sensitive earth conditions performance standards.
c. Comply with the Land Use Code restrictions applicable to slopes forty (40) percent or greater and to areas of colluvial or landslide deposit on slopes of fifteen (15) percent or greater.
d. Limit the maximum gradient of artificial slopes to no steeper than 2:1 [two (2) feet of horizontal run to one (1) foot of vertical fall] unless a geotechnical engineering report and slope stability analysis is provided and shows that a factor of safety of at least 1.5 for static loads and 1.1 for pseudostatic loads can be met, as demonstrated per the methodology in the clearing and grading development standards.
e. Do no clearing, excavation, stockpiling, or filling on the potential slide block of an unstable or potentially unstable slope unless it is demonstrated to the Town Planner or Designee's satisfaction that the activity would not increase the load, drainage, or erosion on the slope.
f. Do no clearing, excavation, stockpiling, or filling on any unstable or potentially unstable areas (such as landslide deposits) unless it is demonstrated to the Town Planner or Designee's satisfaction that the activity would not increase the risk of damage to adjacent property or natural resources or injury to persons.
g. Intercept any ground water, subsurface water, or surface water drainage encountered on a cut slope and discharge it at a location approved by the Town Planner or Designee. Off-site stormwater (run-on) or groundwater shall be diverted away from slopes and undisturbed areas with interceptor dikes, pipes and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
h. Follow the procedures and standards in the clearing and grading development standards related to slopes.
i. Design and protect cut and fill slopes to minimize erosion.
j. Excavated material shall be placed on the uphill side of trenches, consistent with safety and space considerations.

k. Check dams shall be placed at regular intervals within constructed channels that are cut down a slope.

l. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion. Temporary pipe slope drains shall handle the expected peak 10-minute flow velocity from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis shall use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis shall use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. Bare soil areas should be modeled as "landscaped area."

8. Rockeries. Rockeries may be used for erosion protection of cut or fill slopes. The primary function of a rockery is to protect the slope face from soil erosion and sloughing.

a. Rockeries used to protect uncontrolled fill slopes may be no higher than four (4) feet, as measured from the bottom of the base rock.

b. Rockeries used to protect cut slopes or reinforced or engineered fill slopes may be up to a maximum height of twelve (12) feet, as measured from the bottom of the base rock, with the approval of the Town Planner or designee. Any rockery that is over four (4) feet high, as measured from the bottom of the base rock (cut slopes and reinforced or engineered fill slopes only) shall be designed by a geotechnical engineer.

c. A wall drain must be provided for all rockeries greater than four (4) feet in height as measured from the bottom of the base rock, or when the Public Works Department determines that a drain is necessary. The drains shall be installed in accordance with applicable standards from the latest edition of the Stormwater Management Manual for Western Washington or approved equivalent.

d. The geotechnical engineer must provide construction monitoring and/or testing as required by the permit conditions, and submit construction inspection reports to the department for all rockeries that require design by a geotechnical engineer. For each project, or phase of a project, the geotechnical engineer must provide a final letter or report summarizing the results of the construction monitoring for each rockery, verifying that the rockery construction meets the geotechnical recommendations and design guidelines. The final letter or report must be submitted to the department prior to the final clearing and grading inspection.

9. Control of Other Pollutants. Construction site operators must properly handle and dispose of other pollutants that are on-site during construction so as to avoid possible health risks or environmental contamination. Direct and indirect discharge of pollutants to the drainage system, critical areas, wetlands, streams, or any other adjacent properties is prohibited.

a. All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause contamination of stormwater.

b. Cover, containment, and protection from vandalism shall be provided for all chemicals, liquid products, petroleum products, and other materials that have

the potential to pose a threat to human health or the environment. On-site fueling tanks shall include secondary containment.

c. Maintenance, fueling and repair of heavy equipment and vehicles shall be conducted using spill prevention and control measures. Contaminated surfaces shall be cleaned immediately following any spill incident.
d. Wheel wash or tire bath wastewater shall be discharged to a separate on-site treatment system or to the Town of Eatonville.
e. Application of fertilizers and pesticides shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' label requirements for application rates and procedures shall be followed.
f. BMPs shall be used to prevent or treat contamination of stormwater runoff by pH modifying sources. These sources include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. Construction site operators shall adjust the pH of stormwater if necessary to prevent violations of water quality standards.
g. Construction sites with significant concrete work shall adjust the pH of stormwater if necessary to prevent violations of water quality standards. Construction site operators obtain written approval from the Department of Ecology prior to using chemical treatment other than CO2 or dry ice to adjust pH.

10. Dewatering Devices

a. Foundation, vault, and trench dewatering water which have similar characteristics to stormwater runoff at the site shall be discharged into a controlled conveyance system prior to discharge to a sediment pond. Channels must be stabilized (as specified in Element #8 of Ecology's *Stormwater Management Manual for Western Washington*, Volume 2).
b. Clean, non-turbid dewatering water, such as well-point ground water, can be discharged to systems tributary to state surface waters, provided the dewatering flow does not cause erosion or flooding of receiving waters. These clean waters should not be routed through stormwater sediment ponds.
c. Highly turbid or contaminated dewatering water shall be handled separately from stormwater.
d. Other disposal options, depending on site constraints, may include:
    i. Infiltration.
    ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
    iii. On-site treatment using chemical treatment or other suitable treatment technologies.
    iv. Sanitary sewer discharge with local sewer district approval.
    v. Use of a sedimentation bag with outfall to a ditch or swale for small volumes of localized dewatering.

11. Slash Removal. Slash from clearing should be chipped and spread across the site within one (1) year of project completion.

12. Revegetation. The site shall be revegetated with native species and/or landscaped as soon as practical, in accordance with a revegetation or landscaping plan, approved by the Town Planner or Designee.

a. A permanent revegetation plan, utilizing vegetation that is known to have a high natural survival rate, shall be implemented consistent with the Town of Eatonville landscaping, tree protection and replacement, and permanent revegetation regulations in Chapter 18.07 EMC.

b. Where permanent revegetation measures are not in place within seven (7) days in the dry season and two (2) days in the wet season,(October 1 through April 30) the applicant shall provide temporary revegetation or stabilization measures in accordance with the recommendations of the latest edition of Ecology's *Stormwater Management Manual for Western Washington,* and maintain such measures in good condition until the permanent revegetation measures are installed and inspected by the Town of Eatonville.

i. Temporary revegetation during the dry season for all disturbed areas of the site (exposed and unworked) that are not covered by permanent improvements such as buildings, parking lots, and decks shall be hydro-seeded and irrigated within seven (7) days until vegetation has been successfully established or the site otherwise revegetated or stabilized using straw mulch, or other approved methods on an interim basis.

ii. Temporary revegetation during the wet season for disturbed areas of the site (exposed and unworked) that are not covered by permanent improvements such as buildings, parking lots, and decks shall be hydro-seeded, otherwise revegetated, or stabilized using plastic sheeting or other approved methods, on a temporary basis within two (2) days until vegetation has been successfully established.

13. Construction Phasing. Staged construction is allowed only if each phase complies with the code, and if the Town Planner or designee approves a phasing plan.

14. Seasonality – Temporary Restrictions. Seasonality refers to the wet season (defined as the period from October 1 through April 30). Clearing, grading, and other land disturbing activities may be approved by the Town Planner or Designee for proposals that have minimal disturbance of soils and are on sites with predominant soils that have low runoff potential, and are not hydraulically connected to sediment/erosion-sensitive features. The following criteria also apply:

a. Wet season clearing, grading, and other land disturbing activities may be approved provided an erosion and sediment control plan is prepared by a professional engineer that specifically identifies methods of erosion control for wet weather conditions to control erosion/sedimentation, surface water run off, and safeguard slope stability. In a situation where erosion or sediment is not contained on site, construction activity shall cease immediately and notification of the Town Planner or designee shall be made within twenty-four (24) hours.

b. When approval is issued in the dry season (defined as May 1 through September 30), and work is allowed to continue in the wet season, the Town of Eatonville may require additional measures to limit erosion/sedimentation for slope stability. The Town Planner or designee may prohibit land-disturbing activities during certain days of the wet season. Determinations shall be made on a site-specific basis and evaluation of the following:

i. Average existing slope on the site.
ii. Quantity of proposed cut and/or fill.
iii. Classification of the predominant soils and their erosion and runoff potential.
iv. Hydraulic connection of the site to features that are sensitive to erosion impacts.
v. Storm events and periods of heavy precipitation.

c. If a clearing and grading approval is issued for work during the wet season (October 1 through April 30) and the Town Planner or Designee subsequently issues a "Stop Work" order or correction notice for insufficient erosion and sedimentation control, the approval will be suspended until the dry season (May 1 through September 30), or until the Town Planner or Designee determines that weather conditions are favorable and effective erosion and sedimentation control is in place.

d. Certain activities are exempted from seasonal restrictions (For a list of exemptions, see *Stormwater Management Manual for Western Washington*, Construction SWPPP, Vol. 2).

e. The following activities are exempt from the seasonal clearing and grading limitations:
i. Routine maintenance and necessary repair of erosion and sediment control BMPs;
ii. Routine maintenance of public facilities or existing utility structures that do not expose the soil or result in the removal of the vegetative cover to soil; and
iii. Activities where there is one hundred percent infiltration of surface water runoff within the site in approved and installed erosion and sediment control facilities.

15. Maintenance. All temporary and permanent erosion and sediment control devices shall be maintained and repaired as needed. Erosion and sediment control devices that are damaged or not working properly shall be returned to operating condition within twenty-four (24) hours of identifying they are not working properly or receiving notice from the Town of Eatonville, or as otherwise directed by the Town Planner or Designee. The contractor shall:

a. Regularly inspect (weekly and within 24 hours after any runoff producing storm event during the dry season, (May 1 through September 30) and daily including on weekends during the wet season) all temporary and permanent erosion and sedimentation BMPs and maintain them per the development standards so that they function as intended until the site has been permanently stabilized, and the potential for on-site erosion has passed. Inlets should be inspected weekly at a minimum and daily during storm events. Inlet protection devices should be cleaned or removed and replaced when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).

b. Return any BMPs that are damaged or not working properly to normal operating conditions as directed by the town or within twenty-four (24) hours of receiving notice from the Town Planner or Designee. BMPs that must be addressed include: stream buffers/setbacks, stormwater/pollutant protection, natural feature preservation/vegetation retention, critical area protection, setbacks/buffers, wetlands, fish habitat, avoidance of hazards, revegetation,

erosion and sediment control, and permanent retention/detention facilities. The responsibility for maintaining site stability and maintenance objectives for buffer vegetation and permanent erosion, sedimentation, and runoff control structures for the original permit requirements is the responsibility of the property owner once the work is complete and final restoration measures have been installed as per the plans or approved permit requirements.

16. Ponds and Reservoirs. Grading and excavation to construct ponds and reservoirs shall:

a. Meet all applicable setbacks specified in this code, except for stormwater detention facilities authorized by the Town Planner or Designee.
b. Maintain in-stream flows of natural drainage courses.
c. Protect adjacent property from damage.

17. Site-Specific Requirements. Additional, site-specific requirements may be established after a site visit by the town. These requirements shall be based on specific site conditions and are limited to additional temporary erosion and sedimentation control and the mitigation of hazardous or potentially hazardous conditions that pose a threat off site or habitat preservation.

18. Project Management.

a. Construction site operators shall maintain, update and implement their Stormwater Pollution Prevention Plan (SWPPP). Construction site operators shall modify their SWPPP whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the state.
b. For construction sites one acre or larger that discharge stormwater to surface waters of the state, a Certified Erosion and Sediment Control Specialist shall be identified in the Construction SWPPP and shall be on-site or on-call at all times. Certification may be obtained through an approved training program that meets the erosion and sediment control training standards established by Ecology. For sites disturbing more than one acre, site inspections shall be conducted by a Certified Erosion and Sediment Control Lead who shall be identified in the SWPPP and shall be present on-site or on-call at all times.
c. Maintaining an Updated Construction SWPPP - The Construction SWPPP shall be retained on-site or within reasonable access to the site.
d. The SWPPP shall be modified whenever there is a significant change in the design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the state.
e. The SWPPP shall be modified, if during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The SWPPP shall be modified as necessary to include additional or modified BMPs designed to correct problems identified. Revisions to the SWPPP shall be completed within seven (7) calendar days following the inspection.

19. Tree Retention. Trees shall be retained to the maximum extent feasible.

a. Clearing should not occur outside of the areas designated on the clearing plan.
b. No tree(s) or groundcover as defined in section 16.53.030.X shall be removed from a native vegetation area or environmentally sensitive site unless that plot plan and other submitted materials can demonstrate that the removal will enhance the area as discussed in 18.07.090. An exception for the installation of roads and utilities may be approved if it can be demonstrated that alternative access is not practical or would be more damaging and is developed pursuant to an approved development plan.
c. Enhancement may include non-mechanical removal of noxious or intrusive species or dead or diseased plants and replanting of appropriate native species.

20. Protection During Construction. Where the drip line of a tree overlaps a construction line, this shall be indicated on the survey and the following tree protection measures shall be employed:

a. The applicant may not fill, excavate, stack or store any equipment, or compact the earth in any way within the area defined by the drip line of any tree to be retained.
b. The applicant shall erect and maintain rope barriers on the drip line or place bales of hay to protect roots. In addition, the applicant shall provide supervision whenever equipment or trucks are moving near trees.
c. If the grade level adjoining a retaining tree is to be raised or lowered, the applicant shall construct a dry rock wall or rock well around the tree. The diameter of this wall or well must be equal to the tree's drip line.
d. The applicant may not install ground level impervious surface material within the area defined by the drip line of any tree to be retained.
e. The grade level around any tree to be retained may not be lowered within the greater of the following areas: (1) the area defined by the drip line of the tree, or (2) an area around the tree equal to one foot in diameter for each one-inch of tree caliper.
f. The applicant may prune branches and roots, fertilize and water as horticulturally appropriate for any trees and groundcover species which are to be retained.

The Town Planner or designee may approve the use of alternative tree protection techniques if those techniques provide an equal or greater degree of protection than the techniques listed above.

M. Native Soil Protection and Amendment.

1. The duff layer and native topsoil should be retained in an undisturbed state to the maximum extent practicable. In areas requiring grading, remove and stockpile the duff layer and topsoil on site in a designated, controlled area, not adjacent to public resources and critical areas, to be reapplied to other portions of the site where feasible.
2. Soil quality and depth. All areas subject to clearing and grading that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope shall, at project completion, shall demonstrate compliance with the Guidelines for Implementing Soil Quality and Depth (BMP T5.13 in WDOE Stormwater Management Manual for Western Washington 2005).

16.53.060 Failure to comply.

A. Failure to comply with the requirements of this chapter or an order from the administrator or designee regarding best management practices at a construction or site development project shall be subject to a stop work order and/or a civil infraction citation and/or a misdemeanor subject to the penalties of RCW 9A.20.010(2). The civil infraction citation would be in the amount of:

1. Fifty dollars for the first ~~offence~~ offense;
2. One hundred dollars for the second ~~offence~~ offense;
3. Two hundred fifty dollars for each additional ~~offence~~ offense.

B. Each additional day that the failure to comply continues shall constitute a distinct, separate offence. If the administrator or designee determines that any construction or site development practices on private property violate a provision of this chapter or are likely to create a hazard to the public safety, health or welfare, the environment, or public or private property, the administrator or designee may declare such condition a public nuisance and may direct the property owner or persons causing or contributing to the hazardous condition to abate the hazard within a specified period, or the administrator or designee may take action to abate the hazard and recover all costs incurred from the responsible parties. Payments shall be made within 90 days of the day the town submits a bill for costs and any stop work order issued will not be lifted prior to payment. In the event of nonpayment, the town may bring suit to recover such costs, including its attorney's fees, and upon obtaining a judgment, such amount shall become a lien against the property of the owner. A requirement or action to abate the hazard which is appealed pursuant to this or any other title of this code shall not be subject to a stay. (Ord. 2005-20 § 1, 2005).